Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: D. Brian Ballard

GENERAL INFORMATION:

Name: Toyota Motor Manufacturing Kentucky, Incorporated
Address: 1001 Cherry Blossom Way, Georgetown, KY 40324
Date application received: February 16, 2004
SIC/Source description: 3711/Automobile Assembly
EIS #: 21-209-00030
Application log number: 56340
Permit number: V-04-027

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance
[ ] Permit modification
__Administrative
__Minor
__Significant
[ ] Permit renewal
[ ] General permit
[ ]Conditional major
[X] Title V
[ ] Synthetic minor
[ ] Operating
[X] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance
[X] Compliance certification signed
[ ] Compliance schedule included

APPLICABLE REQUIREMENTS LIST:

[ ] NSR
[X] PSD
[ ] Netted out of PSD/NSR
[X] NSPS
[ ] NESHAPS
[ ] Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)
[ ] SIP
[ ] Other

MISCELLANEOUS:

[ ] Acid rain source
[ ] Source subject to 112(r)
[ ] Source applied for federally enforceable emissions cap
[ ] Source provided terms for alternative operating scenarios
[X] Source subject to a MACT standard
[ ] Source requested case-by-case 112(g) or (j) determination
[ ] Application proposes new control technology
[X] Certified by responsible official
[X] Diagrams or drawings included
[X] Confidential business information (CBI) submitted in application
[ ] Pollution Prevention Measures
[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

	VOC (tpy)		PM/PM_{10} (tpy)	
Department	Current Allowable	New Potential	Current Allowable	New Potential
Assembly	614.10	130.80	13.26	5.26
Body Operations	276.60	262.00	40.61	25.73
Paint	3695.50	1861.60	81.01	59.05
Plastics	1828.50	1326.00	73.29	67.11
Powertrain	182.40	182.40	16.10	16.10

TABLE 1 – VOC and PM/PM_{10} Current Allowable and New Potential Emissions for Assembly, Body Operations, Paint, Plastics and Powertrain shops.

HAPS	**CAS #**	**Actual (tpy)**	**Potential (tpy)**
Ethyl benzene	100-41-4	193	289
Styrene	100-42-5	7.0	10.5
Methylene diphenyl diisocyanate (MDI)	101-68-8	0.2539	0.3804
p-Xylenes	106-42-3	0.0895	0.1342
Ethylene glycol	107-21-1	64	95
Methyl isobutyl ketone (Hexone)	108-10-1	63	94
Toluene	108-88-3	354	531
Chlorobenzene	108-90-7	0.6064	0.9087
Hexane	110-54-3	2.77	4.15
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	2.20	3.29
Triethylamine	121-44-8	15.53	23.27
1,4-Dioxane (1,4-Diethyleneoxide)	123-91-1	0.0105	0.0158
Xylenes (isomers and mixture)	1330-20-7	1134	1700
Formaldehyde	50-00-0	35.19	52.73
Carbon tetrachloride	56-23-5	0.0041	0.0061
Methanol	67-56-1	179	268
Benzene (including benzene from gasoline)	71-43-2	0.1917	0.2873
Methyl chloroform (1,1,1-Trichloroethane)	71-55-6	0.7343	1.1004
Vinyl chloride	75-01-4	0.0125	0.0188
Propylene oxide	75-56-9	0.0010	0.0015
Methyl ethyl ketone (2-Butanone)	78-93-3	98	146
Acrylic acid	79-10-7	0.00012	0.00017
Methyl methacrylate	80-62-6	0.0069	0.0103
Phthalic anhydride	85-44-9	5.59	8.37
Naphthalene	91-20-3	88	131
Cumene	98-82-8	18.41	27.58

TABLE 2 – Actual and Potential Source Wide HAP Emissions for Calendar Year 2003.

EMISSIONS SUMMARY (CONTINUED):

Facilities Control	(tpy)	
	Current Allowable	Potential
PM/PM_{10}	57.81	57.81
SO_2	9.33	9.33
NO_X	651.23	651.23
CO	533.80	533.80
VOC	29.40	29.40

TABLE 3 – Products of Combustion Current Allowable and Potential Emissions from Facilities Control.

SOURCE PROCESS DESCRIPTION:
See Statement Of Basis

EMISSION AND OPERATING CAPS DESCRIPTION:

BACT Limits per Shop	VOC (tpy)	PM/PM_{10} (tpy)
Assembly #1	92.4	5.26
Assembly #2	61.3	8.76
Body Operations	422.6	36.1
Paint #1	1865	59.1
Paint #2	1571	60.62
Plastics	1326	70.8
Powertrain	182.4	16.1

TABLE 4 – VOC and PM/PM_{10} BACT Limits per Shop.

EMISSION AND OPERATING CAPS DESCRIPTION (CONTINUED):

D01 - Utility Boilers (545 MMBTU/HR)		
Allowable Emission Rates (lb/MMBTU Heat Input)		
Pollutant	**Natural Gas[1]**	**# 2 Oil[2]**
PM	7.45×10^{-3}	1.43×10^{-2}
SO_2	5.88×10^{-4}	3.04×10^{-1}
NO_X	4.90×10^{-2}	1.43×10^{-1}
CO	8.24×10^{-2}	3.57×10^{-2}
VOC[3]	5.39×10^{-3}	1.80×10^{-3}
Reference Permit # C-86-117 (Revision 2)		
[1]Limts are based on July 1998 ed. of AP-42		
[2]Limits are based on September 1998 ed. of AP-42		
[3]#2 Oil limit is based AP-42 TOC Emission Factor for distillate oil fired industrial boilers		

TABLE 5 – BACT Limits for Utility Boilers (Facilities Control).

D03 - Indirect Heat Exchangers > 1 MMBTU/HR	
Line 2 (690 MMBTU/HR)	
Allowable Emission Rates (Tons/Year)	
Pollutant	**Natural Gas**
PM	13.1
SO_2	1.0
NO_X	172.3
CO	144.7
VOC	9.5
Reference Permit # F-99-029	

TABLE 6 – BACT Limits for Line 2 Combustion Sources.

OPERATIONAL FLEXIBILITY: N/A